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- (B) Sample solution. Transfer about 25 milligrams of the test material, accurately weighed, to a 50-milliliter volumetric flask. Dissolve and dilute to volume with mobile phase.
- (iii) *Calculations.* Calculate the percentages, individually, of MMT and any other compounds detected as follows:

$$T_I = \text{Percent MMT (tetrazole)} = \frac{A_u \times C_s \times P_s \times 100}{A_s \times C_u \times 1,000}$$

$$T_2 = \text{Percent related compound} = \frac{R_u \times C_s \times P_s \times 100}{R_s \times C_u \times 1,000}$$

L = Percent largest related compound =
$$\frac{L_u \times C_s \times P_s \times 100}{R_s \times C_u \times 1,000}$$

where:

 A_u =Area of the tetrazole sample peak;

 A_s =Area of the tetrazole working standard peak;

 C_s =Concentration of the working standard in milligrams per milliliter;

 P_s =Potency of the working standard in micograms per milligram;

 C_u =Concentration of the sample solutions in milligrams per milliliter;

 R_u =Sum of peak areas of other compounds, excepting MMT and cefpiramide, detected in the sample chromatogram.

 R_s =Area of the cefpiramide working standard peak; and

 L_u =Area of the largest related peak, except MMT.

T=Percent total related compounds= $T_1 + T_2$.

- (5) Specific rotation. Dilute an accurately weighed sample with sufficient dimethylformamide to obtain a concentration of approximately 10 milligrams of cefpiramide per milliliter. Proceed as directed in §436.210 of this chapter, using a 1-decimeter polarimeter tube. Calculate the specific rotation on the anhydrous basis.
- (6) *Identify*. Proceed as directed in §436.211 of this chapter using a 1-percent potassium bromide disc prepared as directed in §436.211(b)(1).
- (7) *Chrystallinity*. Proceed as directed in §436.203(a) of this chapter.

[55 FR 14240, Apr. 17, 1990]

§ 442.69 Cefmetazole.

(a) Requirements for certification—(1) Standards of identity, strength, quality, and purity. Cefmetazole is (6R,7S)-7-[2-

[(cyanomethyl)thio]acetamido]-7-methoxy-3-[[(1-methyl-1*H*-tetrazol-5-yl)thio]methyl]-8-oxo-5-thia-1-azabicyclo[4.2.0]oct-2-ene-2-carboxylic acid. It is so purified and dried that:

- (i) Its potency is not less than 970 micrograms of cefmetazole activity per milligram.
- (ii) Its moisture content is not more than 0.5 percent.
- (iii) It gives a positive identity test for cefmetazole.
- (2) Labeling. It shall be labeled in accordance with the requirements of § 432.5 of this chapter.
- (3) Requests for certification; samples. In addition to complying with the requirements of §431.1 of this chapter, each such request shall contain:
- (i) Results of tests and assays on the batch for potency, moisture, and identity.
- (ii) Samples, if required by the Director, Center for Drug Evaluation and Research: 10 packages each containing approximately 500 milligrams.
- (b) Tests and methods of assay—(1) Potency. Proceed as directed in §442.70a(b)(1).
- (2) Moisture. Proceed as directed in \$436.201 of this chapter.
- (3) *Identity*. Proceed as directed in §436.211 of this chapter using a mineral oil mull prepared as described in paragraph (b)(2) of that section.

[59 FR 12546, Mar. 17, 1994]